

## CLAIMS

1. A stud spacer for extending between two studs with each stud having an opening therein, the stud spacer comprising:
  - a main member adapted to extend between the two studs;
  - the main member including first and second end portions;
  - a projection extending from one of the end portions;
  - an opening formed in the other end portion; and
  - wherein one stud spacer may be connected to another stud spacer by
    - extending the projection of the one stud spacer through the
    - opening within one stud and into the opening of another stud
    - spacer.
2. The stud spacer of claim 1 including at least one flange for connecting to one of the two studs.
3. The stud spacer of claim 1 including spaced apart flanges for connecting to one of the two studs.
4. The stud spacer of claim 1 wherein the main member includes a pair of side flanges and a pair of end flanges.
5. The stud spacer of claim 4 wherein the end flanges are adapted to be connected to the two studs that the stud spacer extends between.
6. The stud spacer of claim 5 wherein the main member includes a central section and wherein the side flanges are turned out of the plane of the central section.
7. The stud spacer of claim 6 wherein the end flanges and the side flanges are turned in opposite directions with respect to the central section.

8. The stud spacer of claim 4 wherein at least one end flange is divided into at least two portions and wherein the projection extends between the two portions.
9. The stud spacer of claim 1 wherein the projection includes a turned tab.
10. The stud spacer of claim 9 wherein the tab is turned up with respect to the main member when the stud spacer extends between the two studs.
11. The stud spacer of claim 1 wherein the opening formed in the second end portion of the main member includes a slot.
12. A metal stud wall, comprising:
  - a plurality of metal studs each having at least two flanges interconnected by web and wherein the web of each stud includes an opening and wherein the studs are arranged in a row with the openings in the webs thereof being generally horizontally aligned with one another;
  - a plurality of stud spacers secured in said metal stud wall with each stud spacer interconnected between two studs;
  - each stud spacer including a main member having opposed end portions with each end portion being connected to the web of a respective stud; and
  - wherein each stud spacer includes a projection for projecting through the opening in an adjacent stud and linking to an adjacent stud spacer.
13. The metal stud wall of claim 12 wherein each stud spacer includes an opening for receiving the projection from an adjacent stud spacer.
14. The metal stud wall of claim 13 wherein the projection includes a tab that extends from the stud spacer and wherein the opening for receiving the projection

includes a slot, and wherein the tab and slot are formed at opposite end portions of the stud spacer.

15. The metal stud wall of claim 14 wherein the tab includes a portion that extends in a vertical direction with respect to the stud spacer.

16. The metal stud wall of claim 12 wherein each end portion of the main member includes a flange that is vertically oriented for securement to the web of an adjacent stud.

17. The metal stud wall of claim 16 wherein the main member further includes a pair of side flanges.

18. A method of forming a metal stud wall comprising: inserting a stud spacer between respective metal studs that form a part of the metal stud wall and connecting each stud spacer to a pair of metal studs and linking each stud spacer with an adjacent stud spacer by projecting a projection through an opening in an adjacent stud and linking the projection of one stud spacer with an adjacent stud spacer.

19. The method of claim 18 wherein each stud spacer is secured at opposite ends to the web of a pair of spaced apart studs and wherein the projection of each stud spacer includes a tab that extends through an opening in an adjacent stud and is inserted into an opening formed in an adjacent stud spacer.

20. The method of claim 19 wherein each stud spacer includes a pair of opposed end flanges and wherein the end flanges are connected to a web of a stud located adjacent opposite ends of the respective stud spacers.

21. A stud spacer for extending between two studs comprising:  
a main member adapted to extend between the two studs;  
the main member including first and second end portions;  
a projection extending from one end portion;  
a projection receiver formed on the other end portion; and

wherein either the projection or projection receiver includes one or more locking members such that when a projection of one stud spacer is projected into the projection receiver of another stud spacer a locked condition is realized.

22. The stud spacer of claim 21 wherein either the projection or projection receiver includes one or more stops for engaging the one or more locking members.

23. The stud spacer of claim 22 wherein the locking members are disposed on the projection and the stops form a part of the projection receiver.

24. The stud spacer of claim 21 wherein at least a portion of the projection is deflectable in response to the projection engaging the projection receiver.

25. The stud spacer of claim 21 wherein the locking members comprise a series of locking tabs formed on the projection.

26. The stud spacer of claim 25 wherein the projection receiver includes at least one opening through which one or more of the locking tabs are inserted.

27. The stud spacer of claim 26 wherein the projection receiver includes at least one raised element that defines an opening thereunder.

28. The stud spacer of claim 27 wherein there is provided a pair of spaced apart raised elements that are formed by cutting a slots in the stud spacer.

29. The stud spacer of claim 21 wherein the projection receiver includes at least one stop and wherein the one or more locking members are disposed on the projection and include at least one yieldable locking tab wherein when the yieldable locking tab is engaged with the stop on the projection receiver, the locking tab will yield such that it can pass past the stop and assume a locked position within the opening.

30. The stud spacer of claim 21 wherein the projection includes one or more locking tabs and wherein the projection receiver includes one or more openings for receiving the locking tabs and a retainer for engaging at least a portion of the projection

and holding the projection in a position where the one or more locking tabs are engaged with the one or more openings of the locking receiver.

31. The stud spacer of claim 30 wherein the one or more locking tabs project downwardly from a lower surface of the projection.

32. The stud spacer of claim 30 wherein the one or more locking tabs are angled with respect to the plane of the projection.

33. The stud spacer of claim 30 wherein the retainer extends upwardly and over at least an end portion of the projection when the projection and projection receiver are interlocked.

34. A stud spacer for extending between two studs and connected to one or more similar stud spacers, comprising:

- a. a main member;
- b. the main member having opposed end portions;
- c. a projection extending from one end portion;
- d. a receiver disposed on the other end portion and adapted to receive a projection of another stud spacer; and
- e. wherein when two stud spacers are connected together the projection of one stud spacer will engage and lock with the receiver of another stud spacer.

35. The stud spacer of claim 34 wherein the projection and receiver are disposed such that when consecutive stud spacers are connected together, the projections and receivers will overlie each other.

36. The stud spacer of claim 34 wherein both the projection and receiver include a flap that is at least partially flexible.

37. The stud spacer of claim 36 wherein in a locked position, the flaps of the projection and receiver engage each other.

38. The stud spacer of claim 34 wherein both the projection and receiver include a flexible flap, a hold down element, an opening disposed between the flap and the hold down element, a deflector, and an opening disposed between the deflector and the hold down element.